Claims

[1] A surface light source device, comprising:
a first substrate;
an electrode formed on an outer surface of the first substrate;
a discharge auxiliary layer formed on an inner surface of the first substrate corresponding to a position of the electrode;
a fluorescent layer formed on the first substrate having the discharge auxiliary layer; and
a second substrate facing the first substrate.

[2] The surface light source device of claim 1, wherein the discharge auxiliary layer comprises carbon nanotubes and an oxide.

[3] The surface light source device of claim 2, wherein the oxide comprises at least one selected from the group consisting of magnesium oxide (MgO), strontium oxide (SrO), barium oxide (BaO), aluminum oxide (Al2O3) and a mixture thereof.

[4] The surface light source device of claim 2, wherein the oxide is silicon dioxide (SiO2).

[5] The surface light source device of claim 2, wherein the carbon nanotubes and the oxide are combined in a paste form.

[6] The surface light source device of claim 2, wherein the discharge auxiliary layer further comprises a viscosity adjuster and an adhesive.

[7] The surface light source device of claim 2, wherein the carbon nanotubes are exposed on the oxide.

[8] The surface light source device of claim 7, wherein the carbon nanotubes are exposed at regular intervals on the oxide and the interval is no less than twice a length of the exposed carbon nanotubes.

[9] The surface light source device of claim 1, further comprising a sealing member disposed between the first and second substrates to form a discharge space seal a discharge gas.

[10] The surface light source device of claim 1, further comprising the fluorescent layer on the second substrate.

[11] The surface light source device of claim 1, wherein the electrode is formed on each side of the outer surface of the first substrate and the discharge auxiliary layer is formed on each side of the inner surface of the first substrate cor-

responding to a position of the electrode.

[12] The surface light source device of claim 1, further comprising:
an electrode formed on an outer surface of the second substrate; and
a discharge auxiliary layer formed on an inner surface of the second substrate, the discharge auxiliary layer comprising carbon nanotubes and an oxide.

[13] The surface light source device of claim 12, wherein the electrode is formed on each side of the outer surface of the second substrate and the discharge auxiliary layer is formed on each side of the inner surface of the second substrate.

[14] A surface light source device, comprising:
a first substrate;
an electrode formed on an outer surface of the first substrate;
a discharge fluorescent layer formed on an inner surface of the first substrate, the discharge fluorescent layer comprising carbon nanotubes, an oxide and a fluorescent material; and
a second substrate facing the first substrate.

[15] The surface light source device of claim 14, wherein the carbon nanotubes and the oxide are combined in a paste form.

[16] The surface light source device of claim 14, further comprising a sealing member disposed between the first substrate and the second substrate to form a discharge space seal a discharge gas.

[17] The surface light source device of claim 14, further comprising the fluorescent layer on the second substrate.

[18] The surface light source device of claim 14, wherein the electrode is formed on each side of the outer surface of the first substrate.

[19] The surface light source device of claim 14, further comprising:
an electrode formed on an outer surface of the second substrate; and
a discharge fluorescent layer formed on an inner surface of the second substrate, the discharge fluorescent layer comprising carbon nanotubes, an oxide and a fluorescent material.

[20] The surface light source device of claim 19, wherein the electrode is formed on each side of the outer surface of the second substrate.

[21] The surface light source device of claim 14, wherein the carbon nanotubes are exposed at regular intervals on the oxide and the fluorescent material, and the interval is no less than twice a length of the exposed carbon nanotubes.

[22] A liquid crystal display apparatus comprising:

a surface light source device that includes a first substrate, an electrode formed on each side of an outer surface of the first substrate, a discharge auxiliary layer formed on each side of an inner surface of the first substrate corresponding to a position of an electrode, a fluorescent layer formed on the first substrate having the discharge auxiliary layer, and a second substrate facing the first substrate;
a liquid crystal display panel that displays an image by using a light emitted from the surface light source device; and
a receiving container that receives the surface light source device and the liquid crystal display panel.

[23] The apparatus of claim 22, wherein the discharge auxiliary layer comprises carbon nanotubes and an oxide.

[24] The apparatus of claim 23, wherein the carbon nanotubes and the oxide are combined in a paste form.

[25] The apparatus of claim 22, wherein the carbon nanotubes are exposed at regular intervals on the oxide, and the interval is no less than twice a length of the exposed carbon nanotubes.

[26] A liquid crystal display apparatus comprising:
a surface light source device that includes a first substrate, an electrode formed on each side of an outer surface of the first substrate, a discharge fluorescent layer formed on an inner surface of the first substrate, the discharge fluorescent layer comprising carbon nanotubes, an oxide and a fluorescent material, and a second substrate facing the first substrate;
a liquid crystal display panel that displays images by using a light emitted from the surface light source device; and
a receiving container that receives the surface light source device and the liquid crystal display panel.

[27] The apparatus of claim 26, wherein the carbon nanotubes are exposed at regular intervals on the oxide and the fluorescent material, and the interval is no less than twice a length of the exposed carbon nanotubes.